PRISM ANALYTICAL FRAMEWORKS 1994: A USER'S GUIDE

Second Edition January 1995

Center for Development Information and Evaluation (CDIE)
Bureau for Program and Policy Coordination
U.S. Agency for International Development

This working paper was prepared as a product of USAID's PRISM contract No. PDC-0085-C-00-1141-00 with Management Systems International, with support from LABAT ANDERSON INC., and Research Triangle Institute.

PRISM ANALYTICAL FRAMEWORKS 1994: A USER'S GUIDE

Table of Contents

Introduction	. 1
Overall USAID Analytical Framework	. 3
Economic Growth Analytical Framework	. 5
Democracy and Governance Analytical Framework	. 9
Population, Health, and Nutrition Analytical Framework	17
Environmental Analytical Framework	3 1

The analytical frameworks presented in this working paper were developed by CDIE to facilitate the analysis and reporting of Agency performance information for 1994. They are not the Agency's Strategic Framework which is currently being developed. We are using these analytical frameworks as a resource for the Agency Framework. This second edition of the frameworks is provided as a resources and guide for Missions and offices developing their strategic plans.



FOREWORD

This report is part of a series of working papers that CDIE will be issuing periodically as we handle, as an Agency, some new needs in "managing for results". These needs include:

- improving our ability to focus foreign aid on significant and measurable results;
- coaching and supporting a result-oriented, strategic management process; and
- using more comprehensive information about program performance and results to learn, to change, to educate, and to account for the effective use of foreign aid.

In the interest of reducing the processing time for papers in this series, no copy editing is performed on the original working documents.

(1)

INTRODUCTION

This user's guide introduces the 1994 version of the CDIE analytical frameworks as updated for USAID's "1994 Annual Report on Program Performance." The analytical frameworks structured the Annual Report. Thus this handbook is a useful reference for the report, while also helping managers in their strategic planning and performance measurement efforts.

Analytical frameworks for four of USAID's development priority areas¹ are presented and described. The descriptions of each box in the frameworks are based on the "Implementation Guidelines" as well as Mission strategy statements. The descriptions, furthermore, serve as a guide to categorization and NOT as the official version of Agency policy. The frameworks were developed both to illustrate the Agency's sustainable development strategies as logical hierarchies of results and also to tie the strategies to the USAID Mission strategic plans. Although other parts of the Agency were consulted in updating the analytical frameworks, they are primarily a CDIE product.

The Development of the Analytical Frameworks

In the summer of 1993 CDIE completed four analytical frameworks to analyze and describe what USAID's 85 Missions and offices were doing. The '93 frameworks progressed beyond CDIE's earlier "clustering" of Missions' strategic objectives by similar characteristics. Grounded in development theory, CDIE's goal was a generic causal model of objectives similar across USAID Missions. CDIE identified common objectives and the range of possible strategies and sub-strategies required to achieve them.

The 1994 revisions differ from the earlier efforts because they are based on the "USAID Strategies for Sustainable Development" and the accompanying "Implementation Guidelines." Rather than starting with what Missions are trying to achieve, the '94 frameworks were first created to logically illustrate the 4 sustainable development strategies. With the draft frameworks, CDIE then examined the foci of Mission strategic plans, making slight modifications to the frameworks where necessary. For example, with

The 4 are economic growth, democracy, health and population, and the environment. Since the report, an analytical framework has been created for humanitarian assistance.

² Neither the "Strategies" nor "Implementation Guidelines" were available for the 1993 frameworks. Also, the Guidelines were only released in draft form in early 1995.

the democracy analytical framework, strategic areas where Missions were not currently working were either taken out or combined with other parts of the framework.

Thus, the '94 frameworks are built on the Agency Strategies while also taking into account the strategic plans of USAID Missions. For analysis in the Annual Report. Mission strategies were "mapped" against the analytical framework, giving counts of how many Sustainable Development Missions are working in each area. For instance, in the economic growth area, 16 Missions are trying to achieve "more productive and efficient investment in people."

The Methodology of the Analytical Frameworks

An analytical framework links different levels of results or outcomes according to a causal theory, i.e., a particular set of activities will lead - or at least contribute to - certain results that will in turn achieve a targeted objective. There are two directional relationships among the framework components: up and down. The "up" relationship answers the question of "why" a particular component is included. For example, why is "increased local involvement in managing protected areas" included? - because it contributes to "improved management of protected areas," a higher order objective. Conversely, the "down" relationship addresses the "how" question: how can markets be made more efficient and competitive? One way is to improve the enabling environment of policies, laws and regulations. Another is to increase marketed production of goods and services, and so on.

The analytical framework methodology has several limitations. First, it is a simplified representation of complex causal relationships. As such, it may not take into account the effects of all external conditions affecting the targeted results. Second, the frameworks cannot easily represent the integrated nature of USAID's programs, particularly those which cross different sectors. The frameworks are limited to linking Mission activities to Agency goals and objectives within a particular sector.

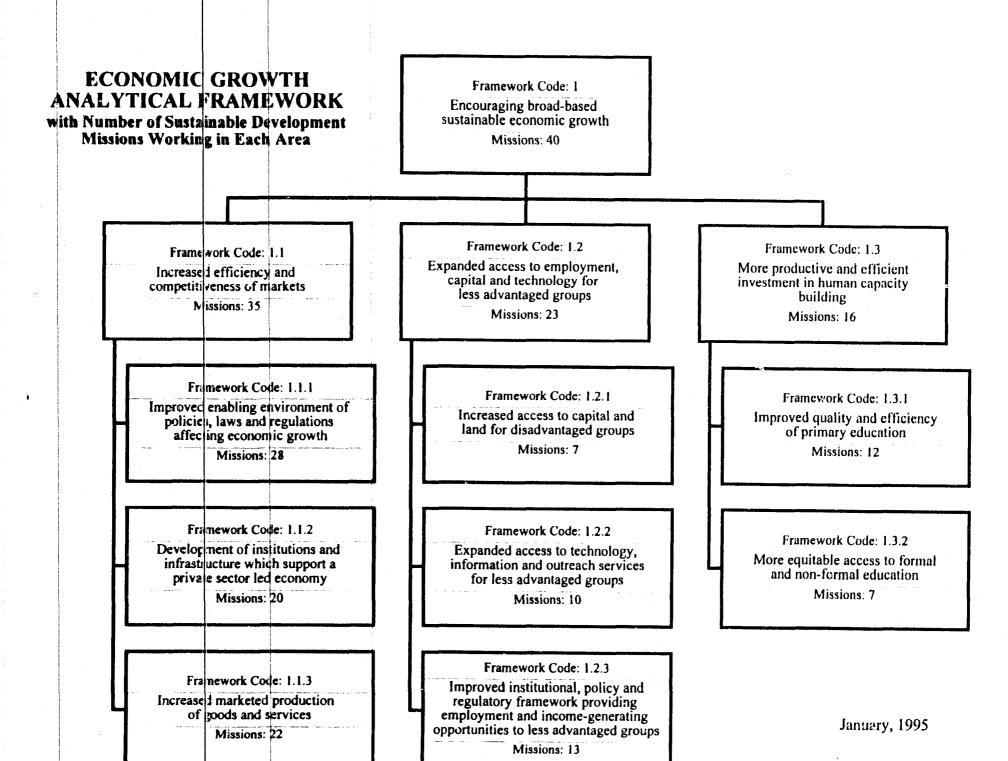
OVERALL USAID ANALYTICAL FRAMEWORK

with Number of Sustainable Development Missions Working in Each Area, 1/95 Sustainable Development

Missions: 41

Missions: 29 Missions: 36 Missions: 25 1.1: Increased efficiency and competitiveness of markets Missions: 35 Missions: 35 Missions: 22 2.1: Strengthened rule of law and respect for human rights Missions: 32 Missions: 34 2.2: Strengthened citizen participation & confidence in a more competitive political process Missions: 17 1.3: More productive: & efficient investment in human capacity building Missions: 16 2.3: Development of a more pluralist, competent, and politically active civil society Missions: 12 2.4: More accountable governance Missions: 14 2.5: Increased and more diverse flow of information to citizens Missions: 5 Missions: 15 Missions: 16 Missions: 36 Missions: 31 A.1: Reduced threats to the global reproductive the global reproductive the global reproduction and use of loss of biodiversity Missions: 17 Missions: 18 A.2: Decreased fertility ((amily planning) Missions: 3 A.2: Improved child health and survival h	Encouraging broad-based stainable economic growth	2: Building democracy	Stabilizing world population/ protecting human health	4: Protecting the environment
and respect for human rights Missions: 35 Missions: 22 1.2. Expanded access to capital employment, & technology for less advantaged groups Missions: 23 1.3. More productive & efficient investmen in human capacity building Missions: 12 2.3. Development of a more pluralist, competent, and politically active civil society Missions: 12 2.4. More accountable governance Missions: 14 2.5. Indreased and more diverse flow of information to citizens Missions: 17 3.1. Improved child health and survival Missions: 28 3.2. Improved child health and survival Missions: 28 4.2. Decreased rate of loss of biodiversity Missions: 13 4.3. Reduced urban and health and survival Missions: 24 Missions: 24 3.4. Prevention of sexually transmitted diseases, including HIV/AIDS Missions: 17 4.5. Protection of the quantitie education for girls and women 4.5. Protection of the quantitie quality of water resources for human activities 4.5. Protection of the quantitie quality of water resources for human activities	Missions: 40	Missions: 29	Missions: 36	Missions: 25
1.2: Expanded access to capital employment, & technology for less advantaged croups Missions: 23 1.3: More productive a efficient investment humman capacity but ding Missions: 16 2.3: Development of a more pluralist, competent, and politically active civil society Missions: 12 3.2: Improved child health and survival Missions: 28 Missions: 28 3.3: Improved maternal health and survival Missions: 24 4.3: Reduced urban and industrial pollution Missions: 8 4.4: Increased environmenta sound production and use of energy Missions: 17 4.5: Protection of the quantities and women 4.5: Protection of the quantities and women	competitiveness of markets	and respect for human rights	(family planning) '	the global environment from climate change
more competitive political process Missions: 23 1.3: More productive & efficient investmen humnan capacity bu ding Missions: 16 2.3: Development of a more pluralist, competent, and politically active civil society Missions: 12 3.3: Improved maternal health and survival Missions: 24 4.3: Reduced urban and industrial pollution Missions: 8 4.4: Increased environmenta sound production and use of energy Missions: 17 4.5: Protection of the quantities education for girls and women 4.5: Protection of the quantities education for girls and women	Missions: 35	Missions: 22	Missions: 34	Missions: 1
1.3: More productive & pluralist, competent, and politically active civil society Missions: 16 2.3: Development of a more pluralist, competent, and politically active civil society Missions: 24 2.4: More accountable governance Missions: 14 3.4: Prevention of sexually transmitted diseases, including HIV/AIDS Missions: 17 4.3: Reduced urban and health and survival Missions: 8 4.4: Increased environmenta sound production and use of energy Missions: 17 4.5: Protection of the quantity education for girls and women 4.5: Protection of the quantity education for girls and women	employment, & technology	participation & confidence in a		4.2: Decreased rate of loss of biodiversity
pluralist, competent, and politically active civil society Missions: 16 Politically active civil society Missions: 24 Missions: 24 Missions: 8		Missions: 17	Missions: 28	Missions: 13
2.4: More accountable governance Missions: 14 3.4: Prevention of sexually transmitted diseases, including HIV/AIDS Missions: 17 4.4: Increased environmenta sound production and use of energy Missions: 17 Missions: 1 3.5: Improved basic education for girls and women 4.5: Protection of the quantity and women for human activities	efficient investment in	pluralist, competent, and		
governance transmitted diseases, including HIV/AIDS Missions: 14 Missions: 17 Sound production and use of energy Missions: 17 Missions: 1 2.5: Increased and more diverse flow of information to citizens and women sound production and use of energy Missions: 17 Missions: 1 3.5: Improved basic education for girls and women for human activities	Missions: 16	Missions: 12	Missions: 24	Missions: 8
Missions: 14 Missions: 17 Missions: 1 2.5: Increased and more diverse flow of information to citizens Missions: 17 Missions: 17 4.5: Protection of the quantification of t			transmitted diseases, *	sound production and use
diverse flow of information education for girls & quality of water resources to citizens and women for human activities		Missions: 14	· · · · · · · · · · · · · · · · · · ·	
Missions: 5 Missions: 15 Missions: 3		diverse flow of information	education for girls	4.5: Protection of the quantil & quality of water resources for human activities
		Missions: 5	Missions: 15	Missions: 3

1,1



1 1 1 1 .

Economic Growth Analytical Framework: Descriptions*

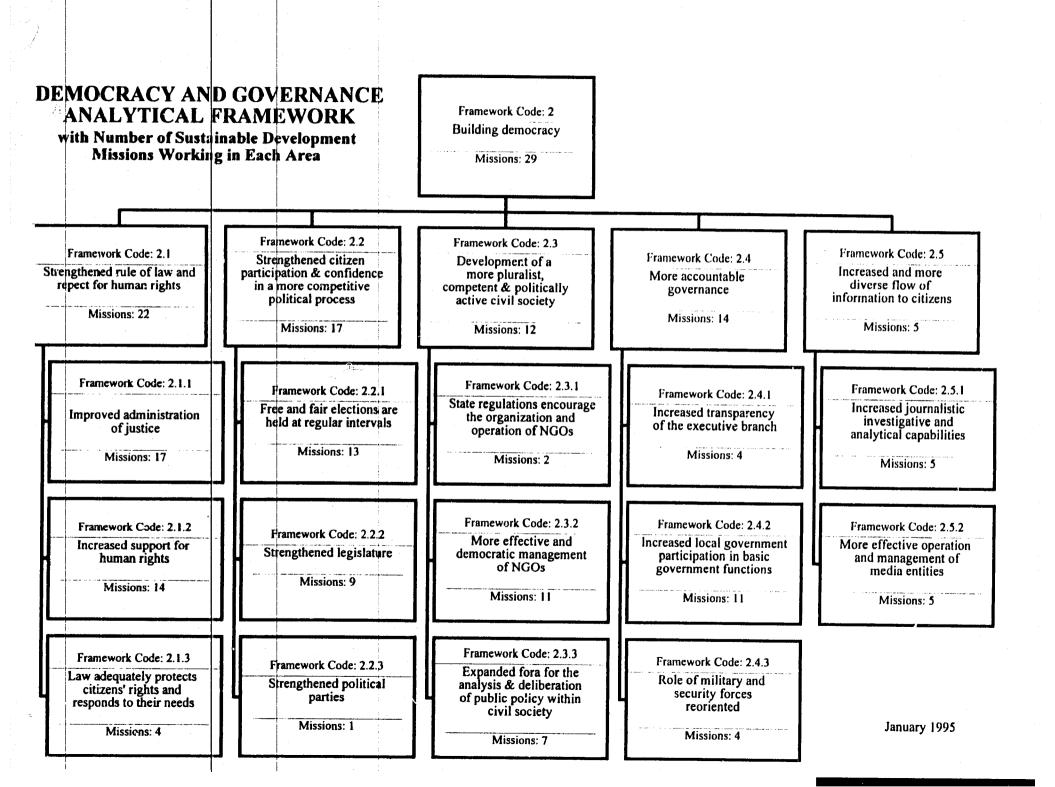
- 1: Encouraging broad-based sustainable economic growth. Economic growth is broad-based and sustainable when all segments of society including the poor, all ethnic groups and women have access to and genuinely participate in productive income-generating activities. Broad-based sustainable growth is built on increased productivity and increased equity. The need is to address the factors that enhance an economy's capacity to grow and to remove the barriers that prevent individual opportunity to benefit from that growth.
 - 1.1: Increased efficiency and competitiveness of markets. Markets are the building blocks of capitalist economies. Markets are efficient if prices adequately reflect costs (including environmental costs); and markets are competitive if they are open enough to respond to what people want. Markets are strengthened through policy and institutional reforms that address government weaknesses, and through interventions and investments that target market imperfections. The key markets include agriculture, finance, infrastructure, labor, and other typically private markets.
 - 1.1.1: Improved enabling environment of policies, laws and regulations are a central determinant of economic performance because they enable markets to function better, which encourages individual initiative and economic opportunity. Included are policies, laws and regulations that affect the monetary system, taxes, prices, the judiciary, agriculture, competition, trade, fiscal spending, the currency, and the financial system.
 - 1.1.2: Development of institutions and infrastructure which support a private sector led economy. Weak or absent institutions and infrastructure greatly inhibit the development of private sector led market economies. Along with the policy, legal, and regulatory environment, market institutions and infrastructure form the foundation for efficient and competitive markets. Institutional and infrastructural development are essential because ultimately foreign donors can only assist local people and institutions to undertake the fundamental tasks of development. The emphasis is on financial services, investment in physical infrastructure, public sector efficiency, privatization, tax collection, and legal systems.

The descriptions of each box in the framework are based on the "Implementation Guidelines" as well as Mission strategy statements. The descriptions, furthermore, serve as a guide to categorization and <u>NOT</u> as the official version of Agency policy.

- 1.1.3: Increased marketed production of goods and services. For stronger markets to grow and flourish, they need more and better goods and services for sale. Developing countries are largely agricultural, and thus expanding and improving the production, marketing and processing of agricultural goods and services is the primary goal. In agricultural and non-agricultural production, the goals include increased production of staple food crops to enhance food security; better access to inputs and market information; and diversification of production for both domestic and export markets.
- 1.2: Expanded access to employment, capital and technology for less advantaged groups. Economic growth cannot be sustained when significant segments of society are unable to participate in a growing economy. While stronger markets and education (1.1 and 1.3) help expand access and opportunity for less advantaged groups, markets never work perfectly and most education efforts target the very young. USAID, therefore, is working for direct and immediate expansion of access and opportunity. Economic opportunities need to be created by making employment, capital and technology available to the poor, women, rural peoples, ethnic minorities, and all other less advantaged groups.
 - 1.2.1: Increased access to capital and land for disadvantaged groups. Capital and land are essential economic inputs and not having access to them is a critical barrier to the economic participation of less advantaged groups. The emphasis in expanding access to capital is on microenterprises and small businesses, which are often severely constrained by a lack of credit and savings services. Microenterprise development increases economic opportunities for the poor and disadvantaged by encouraging them to become microentrepreneurs or by providing them with jobs. With land access, the need is to provide secure land tenure, land use, and settlement arrangements, all of which increase economic incentives for small farmers.
 - 1.2.2: Expanded access to technology, information, and outreach services for less advantaged groups. Providing access to technology, information, and outreach services expands the opportunities for disadvantaged groups to become active participants in the economy, most often as small farmers or microentrepreneurs. Agricultural research makes new technologies available to small farmers. New technologies, like high-yield, disease resistant seed varieties and improved planting techniques, can increase agricultural production and thus farmers' incomes. Quality control, packaging techniques, and other business technologies can increase the quantity and quality of marketed goods. The effective delivery of agricultural and business technologies through outreach

services is also crucial. Access to market information, such as input prices, equipment sources, and commodity prices, can make small farmers and microentrepreneurs more efficient, productive, and profitable.

- 1.2.3: Improved institutional, policy and regulatory framework providing employment and income-generating opportunities to less advantaged groups. A country's social and legal framework can help or hinder access and opportunity for disadvantaged groups. Therefore, there needs to be a focus not only on the macroeconomic framework affecting all markets, but also on the specific institutions, policies, and regulations that enable microentrepreneurs, small farmers, women, and others to become full economic participants. Included here are tactics such as social safety nets; small business associations; retraining and job placement for dislocated labor; rural financial and investment markets; etc.
- 1.3: More productive and efficient investment in human capacity building. Investing in people means giving them the knowledge and skills to improve their lives. Education and training are key in any society's development because knowledge and skills are directly related to productivity and to many other dimensions of well-being, from health and population to democracy and environment. Evidence from fast-growing economies shows that sustained investments in basic education and human capital formation are essential.
 - 1.3.1: Improved quality and efficiency of primary education. The main emphasis of investing in people is on primary education. Countries must establish self-sustaining basic education systems that will enable their people, particularly the poor and women, to lead socially and economically productive lives. The tactics for increasing the quality and efficiency of primary education include more public and private spending and investment; improved financial and administrative management; improved quality of teachers and educational materials; and more efficient allocation of resources.
 - 1.3.2: More equitable access to formal and non-formal education. Education is particularly important for the poor and women, who have traditionally lacked other assets. Therefore, a special emphasis needs to be placed on opening up the system for women and the poor. Even at modest levels, education empowers women to seek and use health and family-planning services. In most countries, better educated women desire smaller families, and a higher proportion of their children survive. Education is essential for enabling disadvantaged groups to become full economic participants.



Democracy and Governance Analytical Framework: Descriptions*

- 3: Building Democracy: The conviction that democracy offers citizens advantages and opportunities that no other form of government can provide has in recent years spread rapidly around the world. Democracy facilitates the protection of human rights, informed participation, and public sector accountability. USAID supports democratic development as an essential part of its sustainable development programs. It works to achieve this goal through the establishment of democratic institutions, an informed and educated populace, a vibrant civil society, and a relationship between the state and society that encourages pluralism, inclusion, and peaceful conflict resolution.
 - 3.1: Strengthened rule of law and respect for human rights: Rule of law protect citizens against the arbitrary use of state authority and against the lawless acts of other citizens. They include security of person and property; freedom of speech, assembly, movement and religion; right to due process; freedom to work at a job of one's choosing for a salary one is able to negotiate; and equality for marginalized groups. These rights provide a framework for citizens to interact with each other and with the state. Without rights, and a legal system that protects those rights, citizens will not have an equal opportunity to defend their interests and have them weighed in public policy formulation. USAID, in its strategies, tries to reinforce recognition and guarantees of these fundamental rights.
 - 3.1.1: Improved administration of justice: The fairness and effectiveness of the systems in place for rendering justice are critical to the protection of fundamental rights. Without these, rights may be compromised on a daily basis and there is little recourse for victims. The judicial branch, particularly if it is independent, can be a powerful institution for protecting rights. It ensures that society is governed by law and not arbitrary will, and that no one or no segment of society is above the law. USAID, in its support for administration of justice, focuses on: creating an active judicial reform constituency; improving access to the judicial process; increasing judicial efficiency and effectiveness; increasing court independence and accountability; and increasing equality, integrity and fairness of the judicial system.

[•] The descriptions of each box in the framework are based on the "Implementation Guidelines" as well as Mission strategy statements. The descriptions, furthermore, serve as a guide to categorization and <u>NOT</u> as the official version of Agency policy.

- 3.1.2: Increased support for human rights: Non-judicial mechanisms can make important contributions to strengthening the rule of law. Particularly in newer democracies, citizens may not have a firm grasp of what their rights are and why they are important. This is often particularly true of least advantaged groups in society. Believing in the value of these guarantees will lead citizens to react to government encroachments and will help protect democratic processes and institutions. USAID works to build support for these fundamental guarantees. In working to accomplish this, USAID focuses both on expanding knowledge about and belief in democratic principles and strengthening the monitoring of and response to human rights violations by government and other groups.
- 3.1.3: The law adequately protects citizens' rights and responds to their needs: Establishing adequate guarantees in the law is a starting point. Many countries have such guarantees enshrined in the law but protect them somewhat indifferently, if at all. In other cases, changing societal needs might require that laws be revised. This may require the establishment of new rights, the extension of existing rights to new groups, or the establishment of the right of judicial review for a supreme court. As countries move toward open market economies, it can also be critical to reform the commercial code to "level the playing field" to support continued private sector development.
- 3.2: Strengthened citizen participation and confidence in a more competitive political process: The establishment of peaceful channels through which citizens can negotiate conflicting interests and participate are at the heart of the democratic process. Representative institutions exist in many countries but they often do not reflect the spread of citizen interests due to the lack of competition for seats. Such governments may also often lack the ability to initiate legislation. In some cases, citizens do not really have a say in choosing their leaders because elections are manipulated. Participation is meaningless without real competition and without effective legislative bodies that have some autonomy from the executive branch.
 - 3.2.1: Free and fair election are held at regular intervals: When elections are manipulated, poorly managed, or held only after lengthy and unpredictable intervals, both participation and competition are compromised. USAID plays an important role in ensuring free and fair election contests around the world. Its strategies in this area focus on supporting the creation of impartial and open electoral laws and regulations; improving the impartiality and effectiveness of

electoral administration; educating the electorate about issues, the importance of voting, and how to vote; and supporting the monitoring of elections, both by international observers and local NGOs.

- 3.2.2: Strengthened legislature: Legislative bodies are for where competing interests can be discussed and negotiated. By strengthening them, citizens are given greater access to the policy process and more control over the behavior of the executive branch. In many countries, however, legislatures are relatively new and are organizationally and technically weak. They generally initiate little legislation on their own. USAID is working with legislatures to help those bodies serve both as checks on executive branch behavior and arenas in which citizens can negotiate and resolve conflicting interests. To this end, USAID works to enhance the role of the legislature in decision-making by increasing oversight of executive branch and military behavior; increasing control over policy-making; and increasing the ability to shape appropriate legislation. To a lesser extent, USAID has targeted greater involvement by civil society in debating legislation.
- 3.2.3: Strengthened political parties: More active and effective political parties can increase the vitality of competition and give citizens greater choice. USAID supports the ability of political parties to understand policy issues, and to interpret and incorporate the wishes of their constituents in developing and promoting a platform.
- 3.3: Development of a more pluralist, competent and politically active civil society: Citizens organizing collectively to accomplish objectives constitute a vital channel for the formulation and representation of interests. Free associations provide important channels for sharing information and for the formulation and representation of interests. Their collective nature helps ensure that their members' interests are weighed by policy-making bodies. They can monitor government performance and create strong pressure for accountability. They lighten the burden on government by organizing to meet a variety of citizen needs and may do a better job of meeting some of those needs than government can. They also give people practice in democratic principles and create opportunities for new leaders to rise.
 - 3.3.1: State regulations encourage the organization and operation of NGOs:

 NGOs are often heavily regulated and controlled by the state, hampering their
 ability to represent their constituents and the public more generally. When they are
 unable to do an adequate job of representing client interests, participation will
 decline, perhaps to the point of threatening their existence. USAID helps to this

end by fostering state regulations which encourage the organization and operation of NGOs.

72

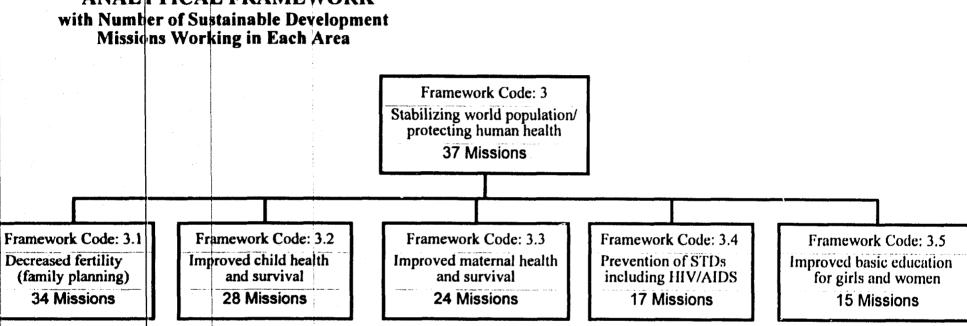
- 3.3.2: More effective and democratic management of NGOs: Once freed from state control, efforts to improve NGO management (including their fund-raising capabilities) and their ability to formulate and lobby for specific policies and interests increase the contribution they can make to representing interests effectively. More successful representation in turn attracts greater participation. USAID supports these efforts by providing technical assistance and training to ensure that NGO staff have the skills necessary to advocate, organize, and raise revenues.
- 3.3.3: Expanded fora for the analysis and deliberation of public policy within civil society: The creation of new channels through which citizen interests and problems can be analyzed and solutions discussed can play an important role in helping citizens define their interests and organize to promote particular solutions. Think tanks and research centers are among the entities that might be funded under this objective.
- 3.4: More accountable governance: One of the primary obstacles to participatory democracy and long-term economic and social development are executive branches which are mercurial, narrowly-based, inept, and corrupt. Political institutions which favor some interests over others, function without transparency or accountability, or concentrate power and resources in the hands of a few, threaten the long-term sustainability of political institutions and people's confidence in democratic principles. Improving governance is a key aspect to ensuring that governments do not waste resources by making poor investment decisions, controlling expenditures and revenues inadequately, and making capricious decisions which erode confidence and provide a poor environment for economic and social investment.
 - 3.4.1: Increased transparency of the executive branch: One of the key factors in improving executive branch accountability is strengthening those institutional mechanisms which exist to prevent corruption and abuse. These mechanisms for establishing internal checks within the bureaucracy include civil service reform (i.e., restructuring incentives and punishments), establishing limits on civil servants' discretion, and strengthening audit and investigative functions. USAID focuses on three primary strategies to accomplish this: strengthening the internal procedure for enhanced oversight; improving the management systems in those

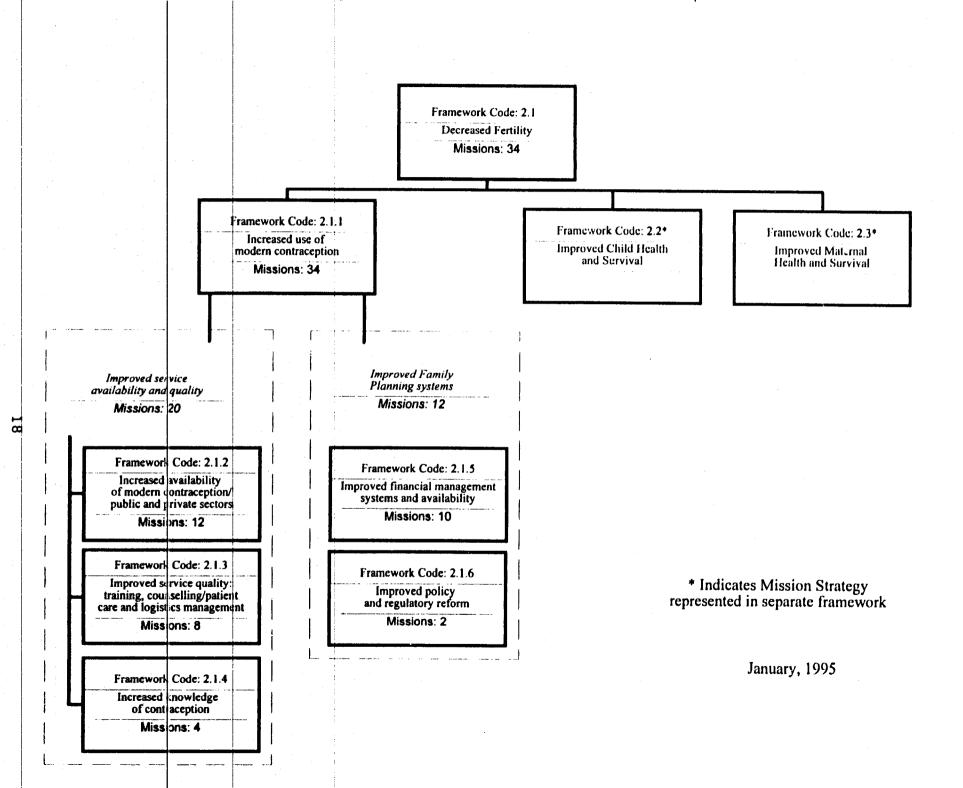
government institutions where opportunities for corruption are the greatest; and building a public constituency against corruption.

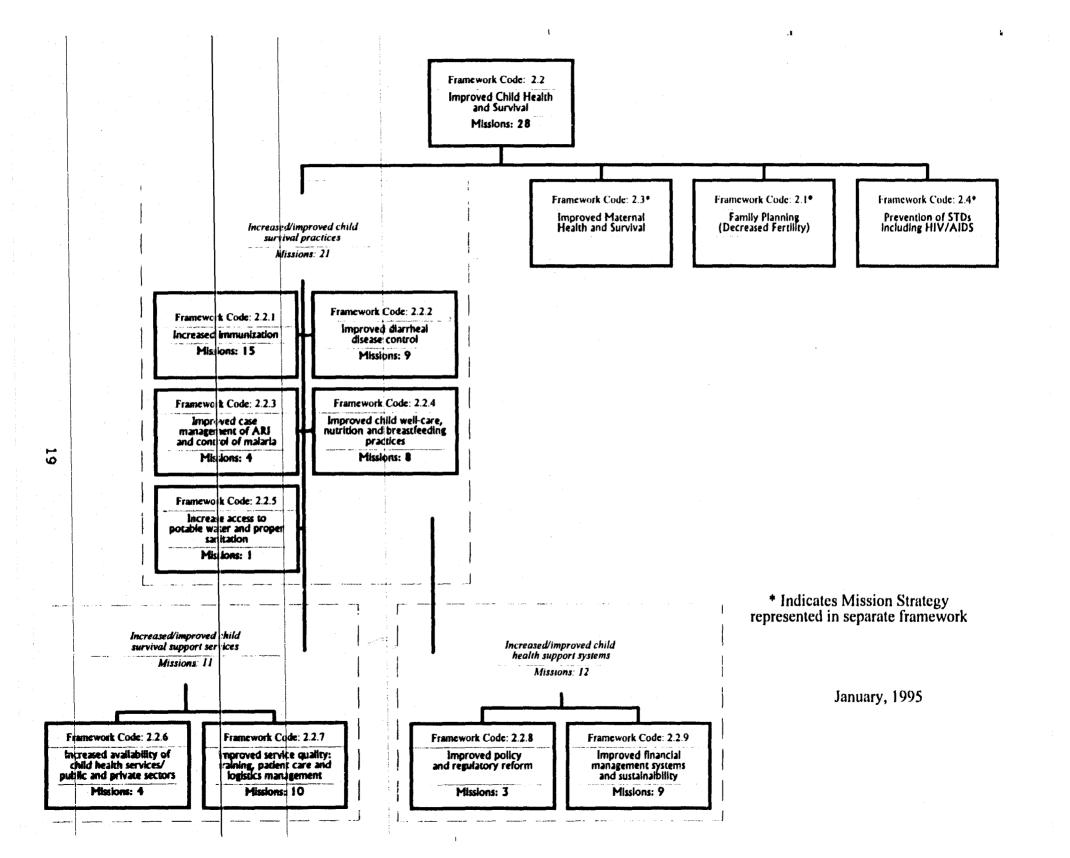
- 3.4.2: Increased local government participation in basic government functions: Decentralization can increase the competence of public agencies by lightening the burden on those at the center and allowing those most knowledgeable about an issue to make the decision about it. It enables citizens who are most concerned about an issue to influence the decision making by putting the source of the decision closer to them. Dispersing power also reduces the political stakes, and minimizes or at least scatters opportunities for corruption and patronage. In its work to promote decentralization, USAID focuses on: encouraging devolution of authority to local governments; improving the effectiveness of local governments; and increasing community involvement in local government decision-making.
- 3.4.3: Role of military and security forces reoriented: The military has overturned or compromised democratic rule in many developing countries. It and state security forces often retain substantial power and resources during a transition process and play an important role in the domestic political process. Often, these forces control substantial financial resources and productive assets, which give them an added ability to exercise power independently of civilian authorities. Therefore, integrating these powerful players into the political process is an important aspect to building long-term democratic roots in countries.
- 3.5: Increased and more diverse flow of information to citizens: In order to determine what their interests are and to participate effectively in policy debates, citizens must have access to a wide range of information, both on policy issues and on how to participate in the decision-making process. An independent, competent and diverse media are key to providing citizens with information. The media is an important check on the behavior of public institutions.
 - 3.5.1: Increased journalistic investigative and analytical capacities: The ability of the media to investigate and analyze events and problems is critical to both the quantity and quality of information to which citizens have access. USAID works with media organizations to strengthen their ability, through training and technical assistance, to improve the quality of their work.

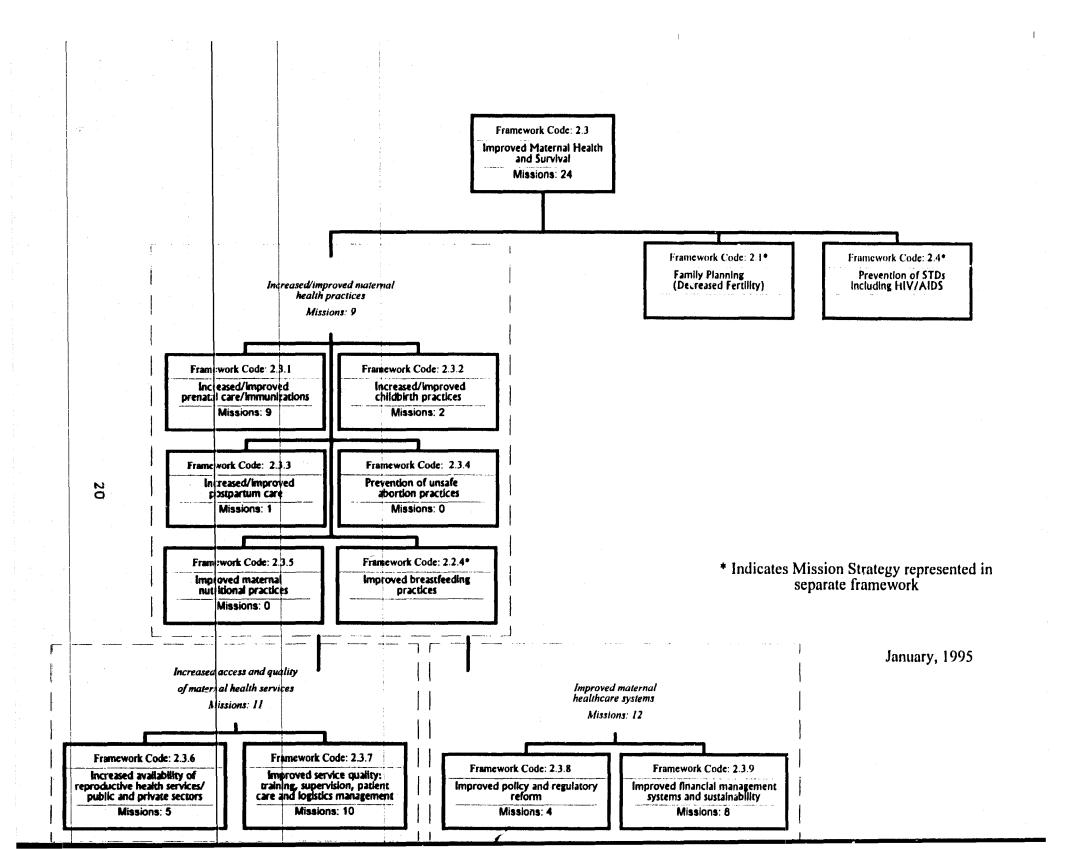
3.5.2: More effective operation and management of media entities: Effective and efficient operation of media entities is key to ensuring their sustainability and high quality of reporting. To support these efforts, USAID assists media entities to improve their financial management, use of improved printing and other mass media technologies, strategic planning, organizational development and the like.

POPULATION, HEALTH, AND NUTRITION ANALTYICAL FRAMEWORK

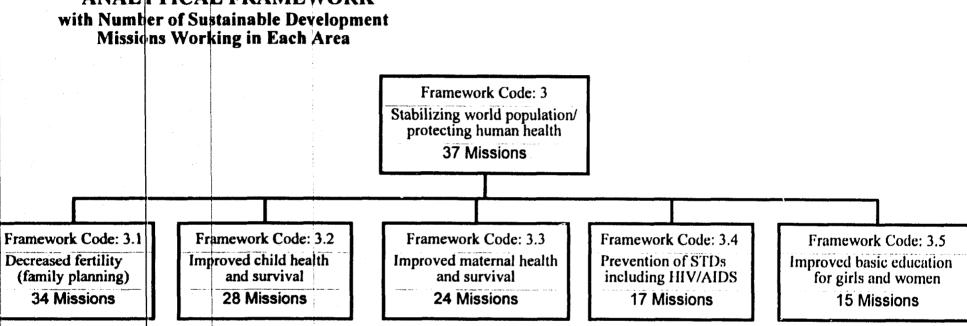


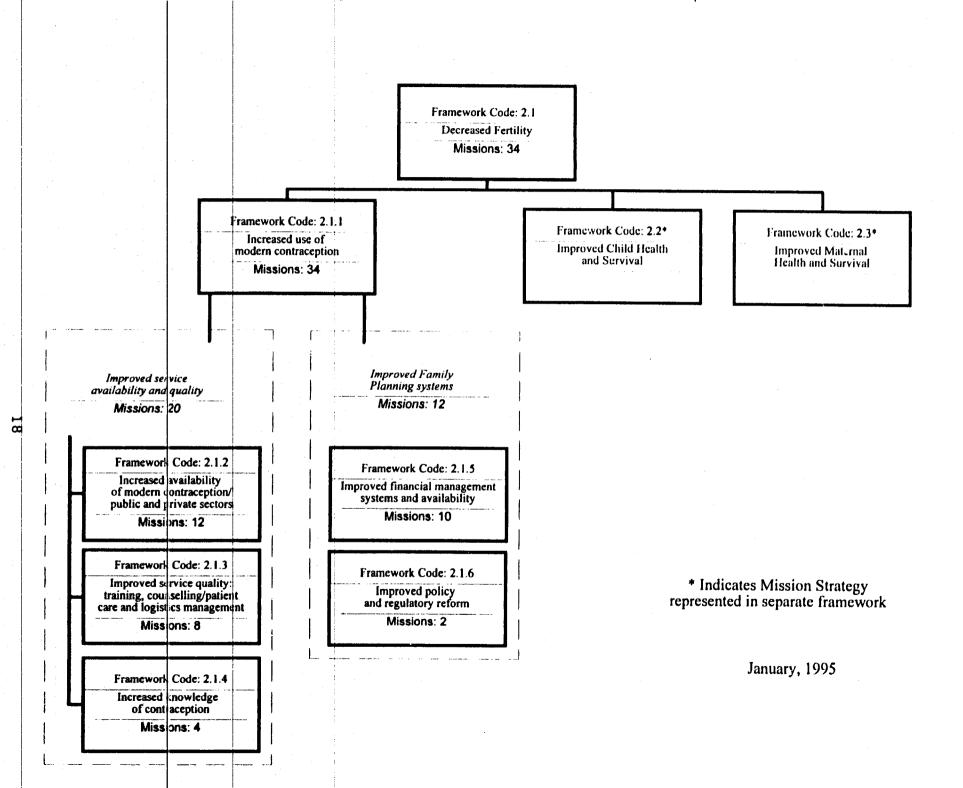


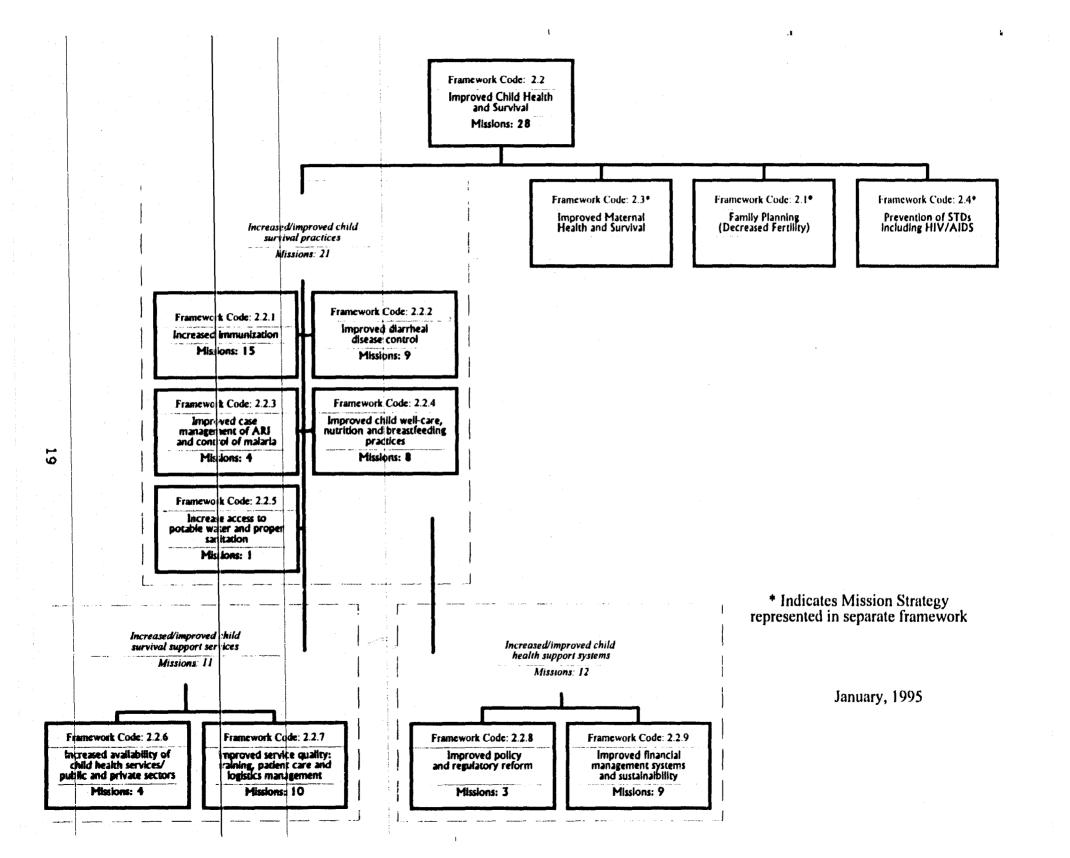


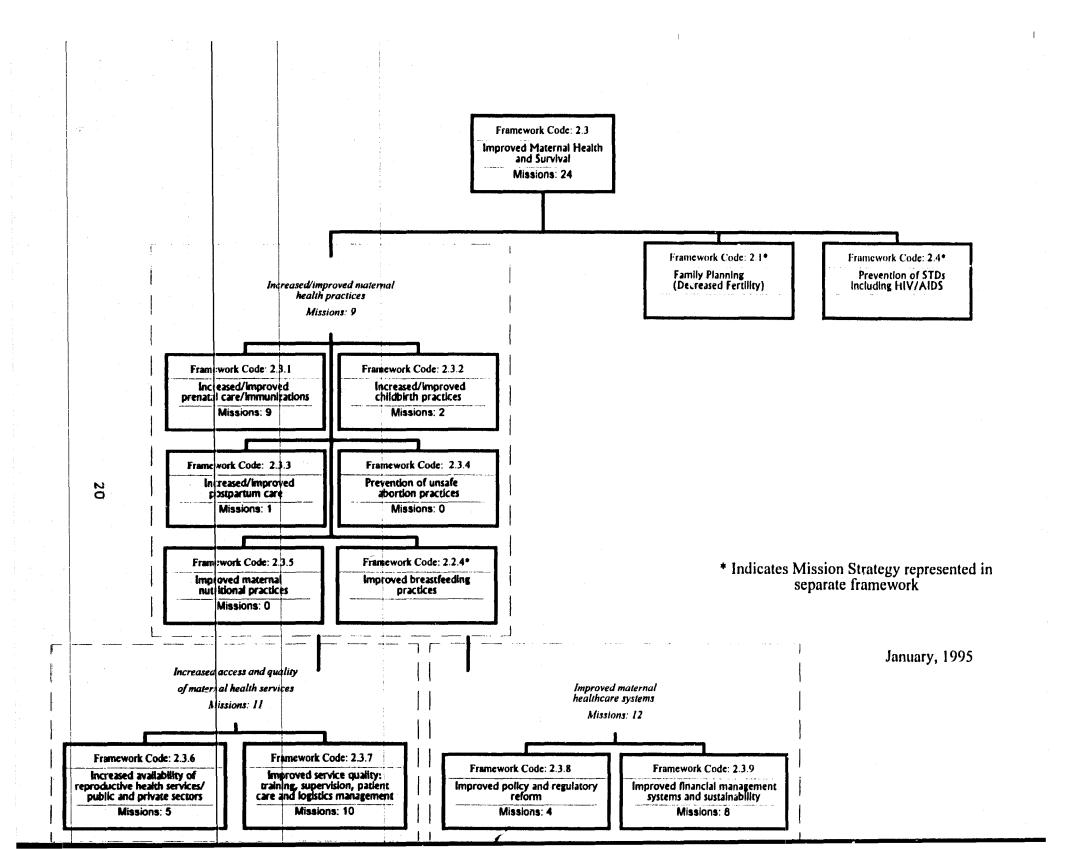


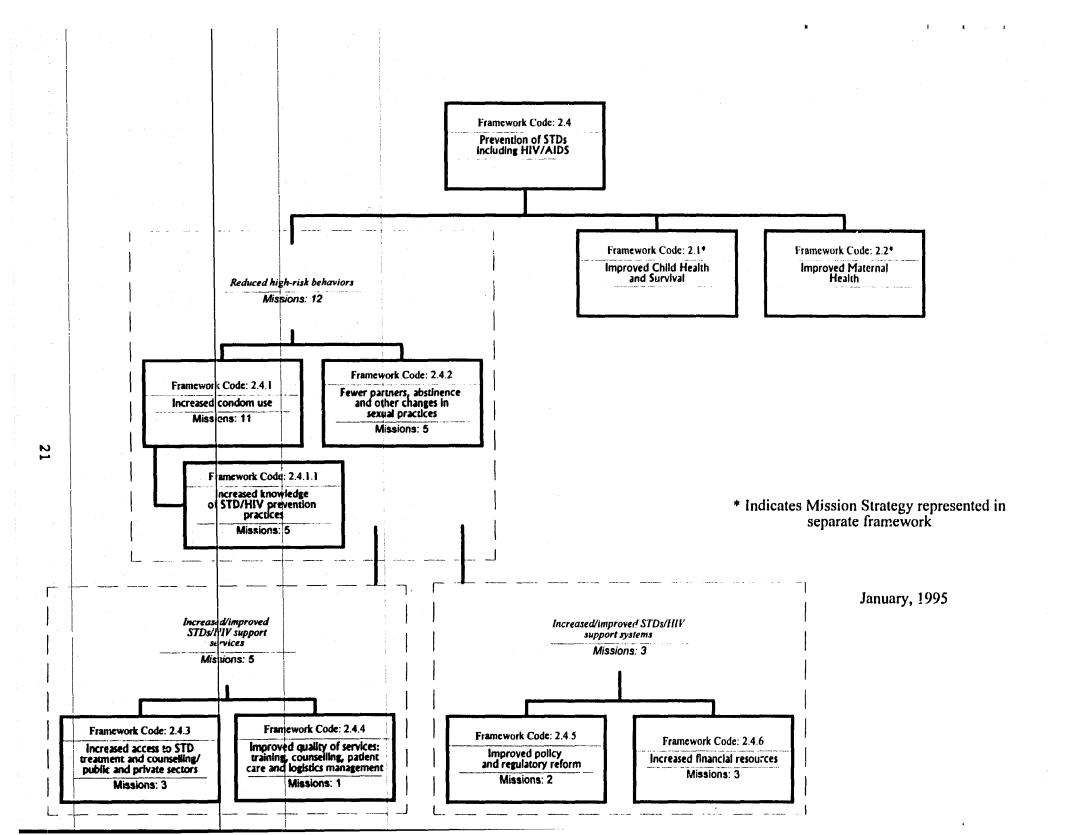
POPULATION, HEALTH, AND NUTRITION ANALTYICAL FRAMEWORK

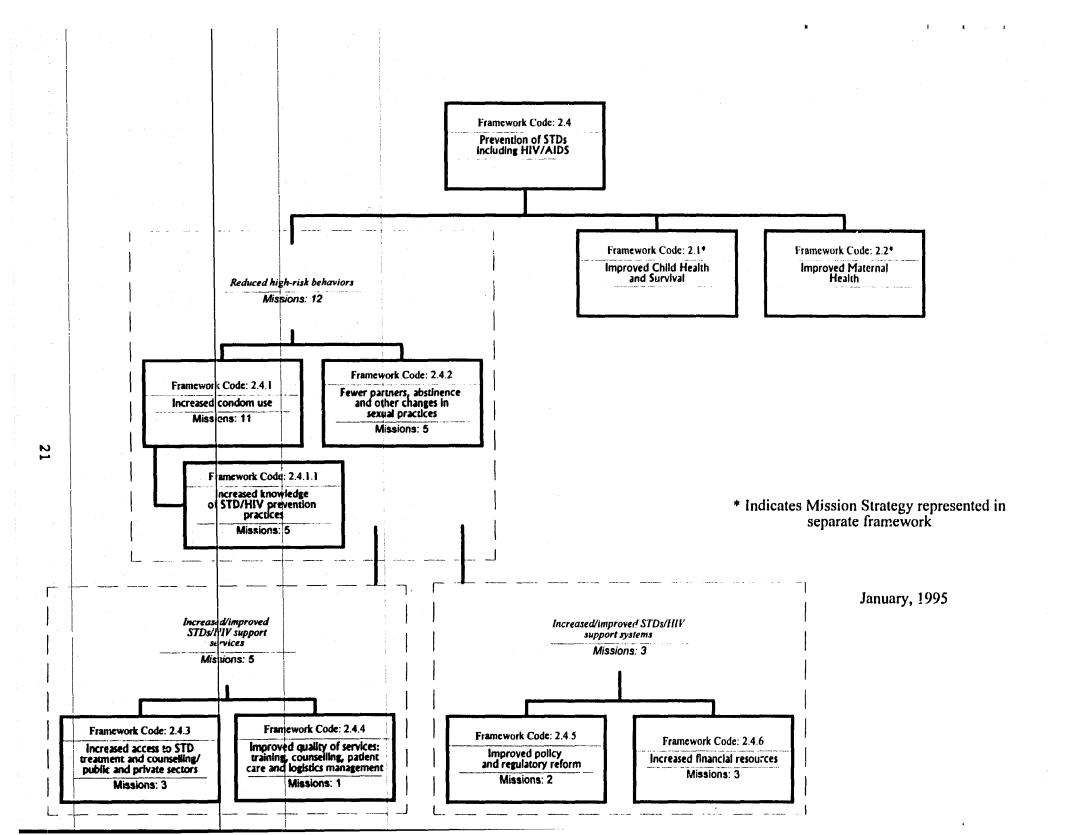


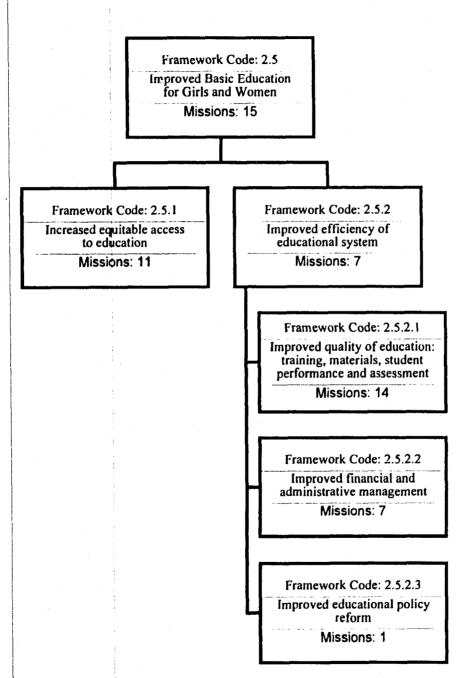












January, 1995

Population, Health, and Nutrition Analytical Framework: Descriptions

- 2.1: Decreased fertility (family planning). High population growth rates are one of the most significant constraints to economic growth and individual well-being. This objective focuses on increased use by women and men of voluntary practices that contribute to reduced fertility.
 - 2.1.1: Increased use of modern contraception. Increasing the use of contraception is one of the most direct means of reducing fertility rates. Other determinants of fertility include breast-feeding, age at marriage and induced abortion. For missions which have identified a reduction in total fertility rates as their strategic objective, the use of contraception is the strategy they most often identify to achieve this. many missions, however, find that reduction in total fertility rates is outside their 'manageable interest' and have chosen to identify the increased use of contraception as their strategic objective. The strategies articulated for achieving this address two aspects: the direct delivery of contraceptive services and the sustainability of family planning delivery systems.

Improved service availability and quality

- 2.1.2: Increased availability of modern contraception in public and private sectors. Research worldwide shows that greater availability of family planning methods leads to increase contraceptive use. This strategy focuses on increasing physical access to contraception. Elements to this strategy include expanding the delivery base to include the public and private sectors (especially NGOs and PVOs) and developing innovative ways to deliver services to different types of clients.
- 2.1.3: Improved service quality: training, counselling/patient care and logistics management. The quality of family planning services is critical to increased and continued use of contraception and, ultimately, the sustainability of a family planning program. To have a significant impact, family planning programs must deliver highly effective methods and address the needs and interests of clients. This strategy focuses on improving the competence of family

^{*} The descriptions of each box in the framework are based on the "Implementation Guidelines" as well as Mission strategy statements. The descriptions, furthermore, serve as a guide to categorization and <u>NOT</u> as the official version of Agency policy.

planning workers and increase the range of contraceptive methods available, logistics management, and supervision of personnel and clients.

2.1.4: Increased knowledge of contraception. The demand for children, and thereby for contraception, is influenced by societal, economic and individual factors. It is also influenced by changes in the availability of and knowledge about family planning services. This strategy focuses on increasing knowledge of and demand for contraception. USAID is undertaking information, education and communication activities which provide accurate and widespread information about family planning.

Improved family planning systems

- 2.1.5: Improved financial management systems and availability. The long-term future of family planning service delivery depends upon sufficient and sustainable financing mechanism to address family planning needs. This strategy focuses on increasing funding for family planning and developing improved financial management systems. This includes the establishment of financing mechanisms such as cost recovery; the allocation of national resources for family planning services; and increase efficiency i service delivery.
- 2.1.6: Improved policy and regulatory reform. The long-term success of family planning programs depends upon the support shown family planning by implementing effective policies. This strategy focuses on creating a favorable environment for the delivery of family planning services. The areas in which USAID works to achieve this include: formulation and implementation of a national family planning policy; reduction in regulations which affect the import, distribution and sale of contraception and/or private sector delivery of contraceptives.
- 2.2: Improved child health and survival. The long-term development of any nation is dependent upon a population which is healthy ad productive. Poor nutrition and disease serve to prevent productive and healthy populations in developing countries. This objective focuses on improving the health of infants and children by improving child survival practices and the availability and financial sustainability of quality services.

Increased/improved child survival practices

2.2.1: Increased immunization. The six common diseases of childhood - measles, diphtheria, pertussis, tetanus, poliomyelitis and tuberculosis - cause over 3.5 million infant and child deaths annually. Immunization is one of the most

powerful interventions for reducing childhood morbidity yet in many countries, vaccination coverage still remains low or vaccines are not as effective as they could be. this strategy focuses on increasing the number of those protected from vaccine-preventable diseases. to this end, USAID is undertaking activities which increase access to vaccines (especially to harder-to-reach populations); increase knowledge of and demand for vaccinations; and improve vaccine effectiveness.

- 2.2.2: Improved diarrheal disease control. Diarrheal disease is the second leading cause of infant and child death in the world today; it is also a major contributor to childhood illness and malnutrition. Oral Rehydration Therapy (ORT) is a simple, cost effective intervention to control diarrheal disease. This strategy focuses on controlling diarrheal disease episodes. USAID is undertaking activities which increase the early recognition of diarrheal episodes and improve access (especially to harder-to-reach populations) to quality ORT remedies.
- 2.2.3: Improved case management of ARI and control of malaria. Acute Respiratory Infections (ARI) account for one third of all deaths of children under five in the developing world. Improved case management of ARI requires early recognition and appropriate treatment of respiratory infections. USAID's activities focus on expanding access to facilities and health workers who can diagnose and treat ARI and educating people to recognize the early stages of ARI and seek treatment. The incidence of malaria in the world is again increasing. This resurgence is especially dramatic in sub-Saharan Africa where approximately one million children under age five die of the disease each year. USAID is undertaking activities which increase access to antimalarial drugs and promote early identification of malaria.
- 2.2.4: Improved child well-care, nutrition and breastfeeding practices. In most children deaths, malnutrition and wellcare of the children are important underlying factors. Breastfeeding provides dramatic protection from diarrhea and other childhood diseases, has a significant impact on nutrition, and is an important determinant of birth-spacing. This strategy focuses o both the number of women breastfeeding and the duration of breastfeeding. USAID's activities in this area focus on promotion of breastfeeding by educating mothers, nutritionists and health care workers. Micronutrient deficiencies vitamin A, iron and iodine are linked to mental development, blindness, anemia, and goiter. AID's activities include direct nutrient supplementation, food fortification, and promotion of dietary diversification.

2.2.5: Increase access to potable water and proper sanitation. Unsanitary water and sewerage systems contribute to diarrheal and other childhood diseases. This strategy focuses on increasing access to water and sanitation, especially in rural areas where access remains very low. Activities contributing to this strategy include the construction of facilities, public education in the correct utilization of facilities, and the development of administrative, maintenance and financing systems.

Increased/improved child survival support services

- 2.2.6 Increased availability of child health services in public and private sectors. The availability of child health services is critical to USAID's objective to improving children's health and survival. This strategy focuses on increasing access to child health services in both the private (PVOs and NGOs) and public sectors.
- 2.2.7: Improved service quality: training, patient care and logistics management. The quality of services is critical to increased and improved child health practices. To have a significant impact, child health programs must be delivered by trained personnel providing effective patient care. In addition, child health facilities should be well stocked with basic equipment and supplies on a regular basic to ensure that patients receive appropriate and timely treatment. This strategy focuses on improving the service quality of facilities including provider training, logistics and administrative management.

Increased/improved child health support systems

- 2.2.8: Improved policy and regulatory reform. USAID's programs focus on fostering a favorable policy environment and increasing public sector and private sector human and financial resources to support child health activities.
- 2.2.9: Improved financial management systems and sustainability. Several programs include activities which focus on ensuring that national and local resources are invested to address priorities in child health, such as increasing host country financing of essential child vaccines and establishing systems which ensure financial sustainability.
- 2.3: Improved maternal health and survival. Each year and estimated 500,000 women die due to complications of pregnancy and childbirth. A large percent of these deaths are due to abortion-related morbidity and mortality. For every maternal death, there are 14 stillbirths and neonatal deaths; most are due to the poor health status, nutrition and care of

women during pregnancy and delivery. This objective focuses on promoting improving maternal reproductive health practices.

- 2.3.1: Increased/improved prenatal care/immunizations. An important component of most of USAID's programs which address safe motherhood include the prevention of neonatal and maternal tetanus the prevention and treatment of important sources of maternal morbidity and mortality. This includes, for example, infections, including STDs, hypertensive disorders, prevention of female genital mutilation, and causes of neonatal morbidity.
- 2.3.2: Increased/improved childbirth practices.
- 2.3.3: Increased/improved postpartum care.
- **2.3.4: Prevention of unsafe abortion practices.** Complications from unsafe abortions represent an important public health problem in most developing countries. USAID programs will focus on improving and expanding contraceptive services, treating abortion-related complications and related care and provide post abortion contraceptive counselling and services.
- 2.3.5: Improved maternal nutritional practices. Poor maternal nutrition is an underlying cause of much morbidity and mortality. Conservative estimates are that 500 million suffer from anemia; a similar number of women are stunted as a result of childhood protein-energy malnutrition; 250 million women suffer the consequences of severe iodine deficiency and 2 million women are blind due to Vitamin A deficiency. This strategy focuses on ensuring that women receive and consume recommended nutritional supplements both during pregnancy and following delivery.

Improved access and quality of maternal health services

- 2.3.6: Increased availability of reproductive health services in public and private sectors. USAID missions will work with host country counterparts to design and implement programs to enhance the availability of essential obstetric care. This will include, for example, leveraging other donor resources to finance equipment, supplies, and the construction of facilities provided by both the public and private sectors.
- 2.3.7: Improved service quality: training, supervision, patient care and logistics management. To reduce the morbidity and mortality associated with

pregnancy and delivery, the quality of care in referral facilities must be dramatically upgraded. This strategy focuses on training service providers in basic life-saving skills in all phases of reproductive health care that are critical to the provision of all pregnancy, delivery, postpartum and post-abortion services.

Improved maternal health care systems

- 2.3.8: Improved policy and regulatory reform. USAID will contribute to efforts to heighten awareness of the importance of reproductive health services, and develop policies and programs that enhance the quality and availability of such services. For example, this strategy will document the enormous burden of poor reproductive health services on adolescents and the barriers to improving access and quality of reproductive health care.
- 2.3.9: Improved financial management systems and sustainability. The establishment of effective financial and management systems are crucial for the support of maternal health programs. USAID will work with health care providers to identify and implement systems that are supported by sustainable resources.
- 2.4: Prevention of STDs including HIV/AIDS. The prevalence of HIV\AIDS has reached pandemic proportions and affects not only individuals but entire economies and public health systems. An increasing number of USAID missions have identified strategic objectives focusing on the reduction of HIV\AIDS transmission. It is important to note that the magnitude of the HIV\AIDS pandemic is only now beginning to be understood and, in many countries, an accurate assessment of HIV prevalence and its rate of growth are still unknown. For this reason, the indicator generally used for this objective, HIV Seroprevalence Rate, should be used with caution. It is not considered to be a very sensitive measure, is difficult to project, and is best used for long-term monitoring (i.e., beyond 10 years).

Reduced high-risk behaviors

- 2.4.1: Increased condom use. USAID is promoting the use of condoms as the principal and most effective means for decreasing the transmission of HIV/AIDS.
 - 2.4.1.1: Increased knowledge of STD/HIV prevention practices. This strategy focuses on increasing knowledge about protection against HIV infection through condom use. By increasing the knowledge about how to prevent transmission of HIV, it is expected that demand for condoms and condom use will increase.

2.4.2: Fewer partners, abstinence and other changes in sexual practices. At present, the only way to ensure prevention of HIV transmission is to promote behaviors which reduce the risk of infection. The focus of this strategy is on encouraging informed and responsible behaviors by those most at risk of HIV infection. - those who have frequent unprotected sex with a number of different partners. This strategy focuses on reducing the number of casual sexual partners, abstinence and other changes in sexual practices.

Increased/improved STDs/HIV support services

- 2.4.3: Increased access to STD treatment and counselling/public and private sectors. In many parts of the developing world, access to STD screening and treatment facilities is extremely limited. Thus, USAID is pursuing a strategy of increasing the access of a variety of individuals to facilities which screen and treat STD cases in order to reduce the incidence of STDs.
- 2.4.4: Improved quality of services: training, counselling, patient care and logistics management. Correct case management for STDs is critical for preventing transmission of these diseases. This strategy focuses on improving the diagnosis and treatment of STD cases in order to reduce recurrent infections. Behavior modification is a significant focus of USAID's STD control efforts. In addition USAID activities will focus on counselling for risk reduction (including partner reduction), promoting acceptability and correct use of condoms, encouraging compliance with medical prescriptions, training acre providers in symptom recognition and assessing risks in changing attitudes.

Increased/improved STDs/HIV support systems

- 2.4.5: Improved policy and regulatory reform. The implementation of policies pertaining to HIV/AIDS is crucial for implementing effective preventive and treatment programs. Gaining support for of key public and private sector policy makers for HIV/AIDS prevention efforts is critical. USAID activities focus on working with host governments and the private sector to bring about policy changes that address the social and cultural impediments to the successful implementation of HIV/AIDS programs.
- 2.4.6: Increased financial resources. There is a serious lack of financial resources globally to address the HIV/AIDS pandemic. Identifying and mobilizing local resources is the key to long term sustainability of HIV/AIDS programs. USAID works with host governments and the private sector to determine sustainable financial resources.

ANALYTICAL FRAMEWORK
with Number of Sustainable Development
Missions Working in Each Area, 1/95

Framework Code: 4 Protecting the environment Missions: 25

Framework Code: 4.1 Reduced threats to the global environment from climate change Missions: 1	Fra nework Code: 4.2 Decreased rate of loss of biodiversity Missions: 13	Framework Code: 4.3 Reduced urban and industrial pollution Missions: 8	Framework Code: 4.4 Increased environmentally sound production and use of energy Missions: 1	Framework Code: 4.5 Protection of the quantity and quality of water resources for human activities Missions: 3	Frumework Code: 4.6 Maintenance of viable resource base for agriculture, forestry, ranching & fisheries Missions: 18
Framework Code: 4.1.1 Reduced growth rate of greenhouse gas emissions Missions: 1	ramework Code: 4.2.1 In proved understanding of plant and animal biodiversity and its conservation Missions: 0	Framework Code: 4.3.1 Promotion of improved urban managment Missions: 3	Framework Code: 4.4.1 Increased use of renewable energy Missions: 0	Framework Code: 4.5.1 Improved quality of inland and coastal water resources Missions: 0	Framework Code: 4.6.1 Promotion of more equitable and effective land tenure & common property management arrangements Missions: 3
Framework Code: 4.1.2 Carbon sinks maintained and increased Missions: 0	I ramework Code: 4.2.2 In proved management of protected areas Missions: 7	Framework Code: 4.3.2 Increased access to shelter, water, sanitation & waste disposal services Missions: 3	Framework Code: 4.4.2 Improved policy formulation & compliance with energy use regulations Missions: 0	Framework Code: 4.5.1 Improved land use planning in coastal & watershed areas Missions: 0	Framework Code: 4.6.2 Introduction & dissemination of appropriate technologies, techniques & practices for natural resource based activities Missions: 12
Framework Code: 4.1.3 Improved information collection and dissemination Missions: 0	Protection & management of biodiversity outside of formerly protected areas Missions: 3	Framework Code: 4.3.3 Improved environmental policies and regulations, and better enforcement Missions: 2	Framework Code: 4.4.3 Increased adoption of efficient energy use technologies and practices Missions: 1	Framework Code: 4.5.3 Increased availability of safe water for poor and underserved populations	Framework Code: 4.6.3 Removal of incentives for unsustainable production activities; & promotion of policies/regs. for sustainable production Missions: 8
nework Code: 4.1.4 Improved policies & action plans for national and international climate	Framework Code: 4.2.4 Improved policy and economic incentives for sustainable use of piological resources Missions: 1	Framework Code: 4.3.4 Increased industrial adoption of pollution prevention & environmental management technologies Missions: 3	Framework Code: 4.4.4 Promotion of the use of innovative technologies Missions: 0	Missions: 2 Framework Code: 4.5.4 Water conservation and management (household, industrial, agricultural, urban,	Framework Code: 4.6.4 Increased local education & awareness about natural resource management issues Missions: 3
change actitivities Missions: 0	Framework Code: 4.2.5 Increased financial and programming commitments to bio diversity conservation Missions: D	Framework Code: 4.3.5 Improved education & awareness activities for waste management practices of urban pops. Missions: 0	Framework Code: 4.4.5 Increased private sector participation in the energy sector Missions: 0	and rural) Missions: 3	Framework Code: 4.6.5 Strengthened public & private natural resource management institutions Missions: 1

Environmental Analytical Framework: Descriptions*

- 4: Protecting the environment. The Agency's and Missions' long range goal is to promote protection of the environment and natural resources on which socio-economic development and human well-being depend. The major approaches to achieving this goal are outlined below.
 - 4.1: Reduced threats to the global environmental from climate change. Rapid climate change induced by increasing concentrations of carbon dioxide and other greenhouse gases arising from human activities presents a long-term threat to the global environment. Agency activities are guided by the principle that energy efficiency, afforestation and a less carbon intensive path toward modernization accelerates economic growth while reducing local, regional, and global environmental risks.
 - **4.1.1:** Reduced growth rate of greenhouse gas emissions. The rapid expansion of energy services will be essential for the continued economic development of developing and post-communist nations. However, by accessing state-of-the-art technology, these countries can achieve higher rates of economic growth with lower rates of energy use. Improved agricultural practices will lead to lower deforestation rates and methane gas emissions.
 - 4.1.2: Carbon sinks maintained and increased. The conversion of forest to other land uses releases carbon stored in the biomass into the atmosphere. Activities that foster sound forestry and agroforestry practices help maintain forest cover, while reforestation initiatives are expanding forest cover in critical areas.
 - 4.1.3: Improved information collection and dissemination. Global environmental monitoring initiatives are required to produce policy-relevant assessments of the magnitude and probable impacts of global climate change. Coordination among host country governments, donors, implementing organizations and communities is a key to sharing scientific information necessary for climate change mitigation.
 - 4.1.4: Improved policies and action plans for national and international climate change activities. As the magnitude and likely impacts of global climate change becomes more evident, national governments and international

[•] The descriptions of each box in the framework are based on the "Implementation Guidelines" as well as Mission strategy statements. The descriptions, furthermore, serve as a guide to categorization and <u>NOT</u> as the official version of Agency policy.

organizations must develop vulnerability assessments and formulate adaptation plans to deal with these impacts. Communication and resource sharing can be improved through increased support for institutions such as the FCCC, INC, and GEF.

- 4.2: Decreased rate of loss of biodiversity. The unparalleled reductions in the variety and variability of living organisms and the critical habitats in which they occur limit human ability to address future constraints and opportunities for medicinal, agricultural, and industrial development.
 - **4.2.1:** Improved understanding of plant and animal biodiversity and its conservation. The first step in stemming the global loss of biodiversity is the identification of critical areas -- those most threatened and those which present the greatest opportunity for conservation -- and the building of public and decision-maker understanding of the value of biodiversity conservation.
 - 4.2.2: Improved management of protected areas. Improved management of protected areas includes institutional development and capacity building, policy implementation, and local education and participation. Institutional development efforts are essential to improve overall managerial capacity of both public and private institutions working to protect natural areas by enforcing regulations against poaching, logging, and illegal extraction of biological resources. Biological monitoring programs are critical for developing baseline information and tracking trends of loss or protection over time.
 - 4.2.3: Protection and management of biodiversity outside of formally protected areas. The expansion of agriculture by large-scale agriculture and ranching interests and by peasant farmers has intensified the destruction of forest habitats. Policies and planning efforts aimed at promoting income-generating activities, strengthening land tenure, and improving agricultural technologies appropriate for the area decrease the need for migration into sensitive areas.
 - 4.2.4: Improved policy and economic incentives for sustainable use of biological resources. Experience shows that distributing benefits from the conservation of biodiversity locally, through ecotourism and extraction of non-timber forest products, encourages local resource protection. Policies that favor local priority setting and promote community involvement in designing and implementing biodiversity protection schemes have a greater chance of success than those that exclude local input.

- 4.2.5: Increased financial and programming commitments to biodiversity conservation. Given the global consequences of major biodiversity losses, local and national conservation strategies should complement broader biodiversity protection initiatives such as the Global Biodiversity Convention.
- 4.3: Reduced urban and industrial pollution. Urban and industrial infrastructure are major components of economic development in most countries. Unregulated industrial emissions and uncontrolled urban growth has resulted in the severe deterioration of many urban environments. More rigorous attention to urban planning and management, coupled with stronger monitoring and enforcement capabilities, sets the stage for a cleaner, healthier, and more productive living conditions.
 - **4.3.1: Promotion of improved urban management.** The responsibility for maintaining a reasonably safe, clean, and efficient urban system can no longer be borne by governmental agencies alone. While strengthening municipalities to undertake greater urban management programs, business and community representatives must be consulted on decisions involving land-use, zoning, and transportation.
 - 4.3.2: Increased access to shelter, water, sanitation & waste disposal services. Stronger, more efficient, and financially stable municipalities are better equipped to provide environmental services to a wider range of people. In addition, privatization of some of these services may be a less costly and more efficient method of reaching some communities.
 - 4.3.3: Improved environmental policies and regulations, and better enforcement. Support for improved legislation and standards must deal with emissions and pollution standards in order to have a basis for enforcement and compliance. Working with the private sector to develop a sense of accountability for their management practices must be undertaken. This is a preliminary step in the direction of private sector responsibility to self-monitor and regulate to improve environmental quality.
 - 4.3.4: Increased industrial adoption of pollution prevention & environmental management technologies. Adoption of pollution abatement and waste management technologies are a major means to reduce urban and industrial pollution. However, adoption of these technologies likely only will follow the change of business culture. Support for the design and adoption of these technologies needs to be supported by foreign investment and increased economic

incentives.

- 4.3.5: Improved education and awareness activities for waste management practices of urban populations. In efforts to focus on the general public (e.g., households, small firms, and vehicle owners), it is important to work toward changing attitudes and providing incentives for people to change behaviors. Environmental awareness about issues related to solid wastes, air pollution, and related urban problems can form the basis of a more educated public, one that will undertake action on their own behalf or one that will respond to appropriate incentives.
- **4.4:** Increased environmentally sound production and use of energy. Energy is one of the most central resources for the economic development of most countries. While energy needs in the developing world are growing seven times faster than in the industrial world, energy shortages are still common in more than 50 percent of USAID-assisted countries. Energy production and use are often major causes of the global accumulation of greenhouse gases and of local air pollution and regional acid rain problems.
 - 4.4.1: Increased use of renewable energy. Sustainable development and increased national and local energy self-reliance requires greater production of renewable energy, including hydropower, solar, biomass, and wind. With additional investment incentives, new and promising technologies, such as those that can make biomass a more efficient and higher quality fuel can be improved and made more widely available.
 - 4.4.2: Improved policy formulation & compliance with energy use regulations. Many government policies discourage energy conservation because they subsidize cheap energy for growth. These subsidies do not reflect the actual costs since the consumer has little financial incentive to save on any already subsidized energy bill. Among the major activities are those that focus on the development of appropriate policies and regulations that encourage efficient and clean energy use.
 - 4.4.3: Increased adoption of efficient energy use technologies and practices. With limits on the economic, social and environmental costs of expanding the energy sector, the most sustainable option for most countries appears to be widespread adoption of more energy efficient technologies and improved managerial/operational practices. These can make important contributions to

environmental quality and reduced costs especially for those countries which must import oil, coal, or other energy supplies.

- 4.4.4: Promotion of the use of innovative technologies. Industries need incentives to invest financial and technical resources in the development, testing, and implementation of innovative technologies. This can be accomplished through greater support for research and development activities, and wider dissemination of technical information related to these technologies.
- **4.4.5:** Increased private sector participation in the energy sector. The private sector may have the motivation and the resources necessary to advance the state-of-the-art related to energy efficient production and use through technical conferences, pilot projects, and partnerships. Such private sector involvement can decrease costs and risks associated with development and implementation of new technologies.
- 4.5: Protection of the quantity and quality of water resources for human activities. The increasing levels of destruction and pollution of the world's freshwater resources are having a tremendous impact on human health and well-being through shortages of safe water for cooking, washing and drinking, and increased incidence of water-borne diseases. The health of marine, estuarine, and mangrove ecosystems is also suffering, and is leading to reduced fish catches and loss of biodiversity.
 - 4.5.1: Improved quality of inland and coastal water resources. Two approaches are being pursued to meet the challenge of increasing the quality of water available for household, agricultural, and industrial consumers. Replanting in watershed areas, and natural regeneration and enrichment plantings in already degraded areas, are effective management practices in areas where commercial forestry, and large or small-scale agricultural production have cleared the groundcover. In an industrial setting, the primary approach is to reduce waste effluent from industry, agriculture, mining, and urban population centers.
 - 4.5.2: Improved land use planning in coastal and watershed areas. A second strategy focuses on improved land use planning and environmental impact assessments for coastal and watershed development. These planning and environmental impact assessment activities include consideration of appropriate wastewater disposal systems, water conservation programs, construction activities that reduce sedimentation and location of disposal sites for excess fill materials

away from vulnerable coastal environments, and location of resort facilities away from beaches, dunes, and shorelines that are particularly fragile.

- **4.5.3:** Increased availability of safe water for poor and underserved populations. While much attention has been focussed on the provision of potable water in cities, marginal urban populations, and isolated rural communities still suffer from water scarcities and unsanitary conditions. Increased investments in small-scale, and low-cost, technologies, appropriate for rural settings are necessary to ensure higher standards of living for all citizens.
- 4.5.4: Water conservation and management (household, industrial, agricultural, urban, and rural). The recycling of industrial water and implementation of policies which increase water prices are being used successfully to encourage water conservation. It is believed that increasing water prices will encourage industrial and agricultural users to either conserve existing water supplies or to invest in technologies that meet their needs for more efficient use of water.
- 4.6: Maintenance of viable resource base for agriculture, forestry, ranching, and fisheries. Environmental degradation is weakening the productivity and potential of the natural resource base on which economic development and social well-being of a majority of the worlds' inhabitants depend. Traditional approaches such as the introduction of appropriate technologies are being complemented by multifaceted programs that address behavioral change, institutional and policy reform and economic growth. The integration of environmental costs into the general economic accounting of agriculture and other primary sector activities such as forestry and livestock production is a necessary long-term objective.
 - 4.6.1: Promotion of more equitable and effective land tenure and common property management arrangements. In many countries, traditional systems of land management have been practiced for centuries. It is possible to use these systems in combination with more modern agricultural production systems to increase yields while protecting the natural resource base. It is also possible to use traditions of protection of forest resources where local residents determine the best approaches to guard against overgrazing, removal of certain types of wood, and over-collection of certain types of minor forest products.
 - 4.6.2: Introduction and dissemination of appropriate technologies, techniques and practices for natural resource based activities. Both men and women need

technologies that are socially acceptable, economically efficient and environmentally sustainable. This can include technologies that help intensify and sustain production rather than to continue to expand the area of production (which is becoming increasingly limited). These technologies include intercropping (e.g., agroforestry), use of nitrogen fixation and other natural nutrient cycles in production, small-scale irrigation, no-till planting regimes, integrated pest management, and village woodlots.

- 4.6.3: Removal of incentives for unsustainable production activities/promotion of policies and regulations for sustainable production activities. Policies and regulations that support sustainable resource management practices are necessary to establish longer-term sustainable production. Policies which have kept food prices artificially low, promoted pesticide use through tax incentives and subsidies, encouraged exploitation of high-value hardwoods, and subsidies for the expansion of ranching, need to be reformed. Among the policies that might be supported are the development of environmental accounting systems which include natural resources in the equation for national economic growth and changes in tenure laws that give rights and title to local people.
- 4.6.4: Increased local education and awareness about natural resource management issues. Making information and resources available to local resource managers (both men and women) is a key to fostering environmentally sound local activities. These resources can include information about low-resource agricultural techniques such as agroforestry, support for local reforestation efforts, seedlings and information about management techniques for stall feeding of livestock, and environmental education in adult and child literacy programs to encourage long-term sustainability of resources.
- 4.6.5: Strengthened public and private natural resource management institutions. Even the most thoughtful and well-designed programs for natural resource management sometimes fail to meet their objectives on account of weaknesses of the implementing institutions. There is no substitute for efficient organization, adequate funding, and qualified staff to meet the analytical and implementation challenges faced by natural resource management institutions.